Flow Monitors - Flow Switches
Excess Flow Valves - Flow Meters

Welcome to CTE Chem Tec Equipment.
Leading manufacturers of Flow Monitors, Flow Meters, Flow Switches, and Excess Flow Valves for 35 years.

Flow Switches (also known as Flow Monitors and Flow Sensors) give switch contact at a predetermined flow rate. Flow Meters provide varying electrical output with fluid flow. Excess Flow Valves are normally open valves that close automatically at a predetermined flow rate.

We specialize in the lower flow ranges -- i.e. 120 SCFM air, 20 GPM water, or less. Flow Switches have fixed and adjustable models. All categories have a variety of flow ranges and pipe sizes.

CTE is the only manufacturer of all Teflon® Flow Switches and Flow Meters.

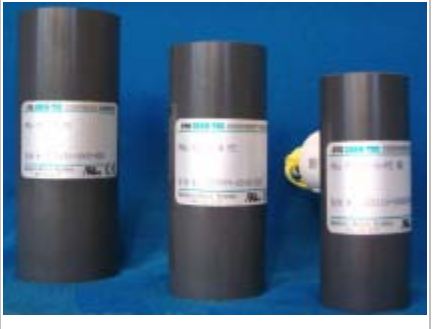
Important Notice: All of our products containing reed switches are now available with digital solid state switching.

Please check out our exciting and innovative NEW PRODUCTS and ADD-ON's to our existing product line.

INSTALLATION & MAINTENANCE MANUALS are now available in PDF format.

www.flw.com/chemtec Distributed By FLW Inc, *(800) 576 -6308*

For economical monitoring of higher flows of corrosive and non-corrosive liquids.



Recognized File E75356

Recognized 73/23/EEC,93/68/EEC

Economical Liquid Flow Sensor

Laser Cooling Systems

Heat Pumps

Cooling Systems

Features

- Non-Adjustable Flow Monitor
- Low Maintenance
- Close On-Off Differential
- No Seals
- Single Moving Part

- In Line Vertical Plumbing
- Materials: 316ss, Brass or PVC
- Confirms: Normal Flow Condition
- Senses: High flow or Low flow conditions
- Output: Switch Contact

Operation

As flow is established upward through the unit and continues to increase, the pressure differential across the magnetic piston increases until it overcomes the magnetic piston's resistance (mass). This force causes it to progress fully upward to actuate the dry reed switch. This is a snap action and occurs in the decreasing mode as well.

- Actuation Points for increasing flow
- Flow Setting Accuracy ± 10% of actuation point
- Deactuation (decreasing flow) averages 10% less than actuation (increasing flow)
- Repeatability ± 2%
- Unit will pass greater flows

Calibration Range in Water LPM (GPM)

	FS-50		FS-75		FS-I	
Calibration Poit	**PVC**	**Brass or 316ss**	**PVC**	**Brass or 316ss**	**PVC**	**Brass or 316ss**
A	0.57 (0.15)	0.95 (0.25)	0.76 (0.20)	1.89 (0.50)	0.95 (0.25)	7.57 (2.00)
B	0.95 (0.25)	1.89 (0.50)	1.89 (0.50)	3.79 (1.00)	2.84 (0.75)	9.46 (2.50)
C	1.89 (0.50)	3.79 (1.00)	2.84 (0.75)	7.57 (2.00)	3.79 (1.00)	11.4 (3.00)
D	2.84 (0.75)	5.68 (1.50)	3.79 (1.00)	11.4 (3.00)	7.57 (2.00)	15.1 (4.00)
E	3.79 (1.00)	7.57 (2.00)	5.68 (1.50)	15.1 (4.00)	11.4 (3.00)	22.7 (6.00)
F	4.73 (1.25)	9.46 (2.50)	7.57 (2.00)	21.8 (5.75)	15.1 (4.00)	32.2 (8.50)

Pressure Loss Table

	• P To Atmosphere at Set Point PSID (BARD)
Water at Set Point PVC Units All Set Points	0.034 (0.50)
Metal Units All Set Points	0.069 (1.00)

Specifications

Materials	Maximum Working Pressure PSIG (BARG)	Wetted Parts
PVC	100 (6.89)	PVC, Epoxy, Titanium
Brass	250 (17.22)	Brass, Epoxy, Titanium
316ss	500 (34.45)	316ss, Epoxy, Titanium

For economical monitoring of flows of corrosive and non-corrosive gases and liquids.

Switch Data	
SPST Hermetically Sealed Reed Switch	**SPDT** Hermetically Sealed Reed Switch
Max Switching Voltage DC (V) 200 AC (V) 150	Max Switching Voltage DC (V) 175 AC (V) 120
Contact Rating DC (W) 50 AC (VA) 70	Contact Rating DC (W) 5 AC (VA) 5
Max. Switching Current DC (A) 1.0 AC (A) 0.7	Max. Switching Current DC (A) .25 AC (A) .25

Leads
SPST Leads 18 in. min. from body 22 AWG, TFE insulation.
SPDT (optional) Leads 18 in. min. from body 24 AWG, TFE insulation. • green - N.C. • blue - N.O. • white - Common

Above values for resistive loads only. For inductive loads, surge current and rush current -- contact protection is required; consult your local representative. SPDT is UL recognized.

	Inlet/Outlet Ports (Inches)	
Fluid Ports	**FNPT (PVC)**	**MNPT (Brass or 316ss)**
FS-50	1/2"	1/2"
FS-75	3/4"	3/4"
FS-1	1"	1"

Electrical Conduit: 1/2" FNPT (PVC Model only)

Temperature Operating Range: 32° to 220° F (0° to 104° C) for Brass and Stainless Steel
32° to 120° F (0° to 49° C) for PVC. For other temperature ranges, consult factory.

Installation:
Metallic Bodies Only: Mount with inlet down vertically. Leads up - Normally Open;
Leads Down - Normally Closed.
PVC: N.O. Conduit Offset Up; N.C. Conduit Offset Down.
Filtration - 100 Micron Filter Recommended.

	Dimensions Inches (mm)		
	FS-50	**FS-75**	**FS-I**
PVC A	3.2 (81.3)	3.5 (88.9)	4.3 (109.2)
PVC B	2.0 (50.8)	2.0 (50.8)	2.2 (55.9)
METAL C	4.0 (101.6)	4.5 (114.3)	4.5 (114.3)
METAL D	1.2 (30.5)	1.4 (35.6)	1.7 (43.2)

How to Order

FS Model	1 Size	A Calibration Point	P Materials	C Conduit	SPDT Switch Option	OPTIONS Any of the following options may be added:
	-1 -50 -75	(See Table)	P PVC B Brass S 316ss	(PVC Model Only)	SPDT Single Pole Double Throw N.O. Single Pole Single Throw Normally Open Leads Up N.C. Single Pole Single Throw Normally Closed Leads Down	1 All Wetted Parts PVC HT High Temperature Option 340° F (171° C) S Special Custom Option

* Consult Factory

Note:
All dimensions and specifications are subject to change for quality improvement. Not responsible for typing errors.